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A NEW CHITON FROM THE NEW ENGLAND COAST.

BY WILLIAM HEALEY DALL.

Mr. Dwight Blaney of Boston, while dredging in twenty fathoms off Ironbound Island on the Maine coast, was fortunate enough to discover a species of Chiton which, after comparison with Northeast American and North European species, appears to be new.

Seven species of Chitonidæ are known from the coast of New England in less than 100 fathoms. All these have been known for many years. One Arctic species is reported from the Gulf of St. Lawrence and may reach the Maine coast. Besides these there are two species known only from abyssal water in the North Atlantic, not from the coast and not properly belonging to the New England fauna. It is therefore a matter of more than common interest to have a new species discovered, and, because the circulation of the Proceedings of the Biological Society of Washington may probably not reach the mass of malacologists, it was thought desirable to reprint the diagnosis here and add to it a careful illustration of the type.

TONICELLA BLANEYI Dall. Plate IV. Proc. Biol. Soc. Wash., xviii, 1905, pp. 203-4, Sept. 2, 1905.

Shell of a deep rose-color, with fine white lineations and reticular markings; girdle brown, apparently naked, but exhibiting under high magnification a microscopic granulation with a row of small spinules at the extreme edge, as in *T. marmorea*; the coloration of

the valves outside, in the type specimen, is fairly uniform but probably more or less variable among individuals; the valves inside are of a deep rose-pink, paler toward the edges; surface minutely more or less quincuncially nunctate, but this is visible only when magnified; the sculpture consists of (on the midvalves usually three) radial riblets with a tendency to bifurcate or break up into segments distally; there are no distinctly marked areas on the midvalves, but the part of the valves which bears what in many chitons are called the lateral areas, in this species carries two or three, sometimes bifurcate, thread-like ribs which are flattened above and rarely reach the mucro of the valve, being usually evanescent dorsally; there are also more or less deeply impressed lines of growth; the median part of the valves is nearly smooth except for the microscopic punctation; anterior valve semicircular, with numerous, more or less irregular, radial riblets that resemble those on the midvalves; the eaves are conspicuously spongy; the insertion plates are blunt, crenulate at the edge, but not radially striate; the anterior valve in the type has 10, but would seem normally to have either 9 or 11 slits, as one seems missing or in excess, on one side; the midvalves have one slit on each side, their anterior lamellæ are nearly continuous across the dorsal sinus; the posterior valve is small, without a mucro, the incremental lines strong, the ribbing obsolete or nearly so; in the type. while there is not a posterior sinus like that of Chætopleura, there is a certain flattening and the insertion plates bordering this part of the valve are poorly developed; there are 7-9 slits between which the distal edges of the plates are more or less irregularly crenate; in the dried specimen the muzzle has a prominent "veil" or tegumentary margin; the etenidia number about 15 on each side and extend forward on each side of the foot to the fourth valve; length over all (dry), 13mm.; width, 8 mm.; dorsal angle, 120°.

Dredged in 20 fathoms off Ironbound Island, Frenchman's Bay, near Mt. Desert Island, Maine.

From Trachydermon ruber, Tonicella marmorea, and similar species, this form can be at once distinguished by the ribbing. If the type specimen be characteristic in its color, the pattern and hue would be equally distinctive. In T. ruber the girdle is pubescent and parti-colored; in T. marmorea and the present species it is of a uniform brown. The type specimen has been generously donated to the U.S. National Museum.

The species seems somewhat intermediate between *Tonicella* and *Trachydermon*, with a leaning toward the former, while it seems to be most nearly related specifically to *Tonicella marmorea* of Fabricus.

EXPLANATION OF PLATE IV.

Fig. 1. Middle valve, interior, from below; 2. The same valve from above; 3. Front valve from above; 6. The same valve from below; 4. The tail valve from above; 5. The same valve from below; owing to the spongy condition of the margin the artist has slightly exaggerated some of the vertical striæ so that they are liable to be taken for true notches, the number of which is as stated in the diagnosis above. All the figures are considerably magnified, and to a uniform scale.

A NEW BRACKISH-WATER SNAIL FROM NEW ENGLAND.

BY HENRY A. PILSBRY.

Mr. Owen Bryant collected at Cohasset, Massachusetts, the past summer, specimens of an Amnicoloid snail which appears to be undescribed. It was found living in company with Paludestrina minuta (Rissoa minuta of authors) and Odostomia impressa.

PALUDESTRINA SALSA n. sp. Pl. III, fig. 10.

Shell very thin, perforate, oblong-conic, about the shape of *Amni-cola lustrica*; corneous-gray or a little greenish; the surface having the lnster of a dull silk, very finely striatulate, weakly decussated with faint spiral striæ.

Whorls $5\frac{1}{2}$, moderately convex, with the suture impressed but not so deep as is usual in *Amnicola* or *Paludestrina*. Aperture ovate, a little less than half as long as the shell, subvertical. Peristome thin and sharp, a little sinuous, the outer lip being somewhat retracted below its upper insertion; columellar margin concave, thin; the inner margin adnate, thin and straightened for a short distance near the upper angle of the aperture. Length 3.1, diam. 2, length of aperture 1.5 mm.

Cohasset, Mass. Cotypes in collections of the A. N. S. Phila. (no. 90445), Boston Society of Natural History, and Owen Bryant.

Compared with the common *P. minuta* (Totten), this new species differs in its more broadly conic shape, less deep sutures and larger